### **BEFORE**

# THE PUBLIC SERVICE COMMISSION OF

# SOUTH CAROLINA

DOCKET NO. 2003-326-C

	)
IN RE:	)
Analysis of Continued Availability of )	
Unbundled Local Switching for Mass Market	)
Customers Pursuant to the Federal Communication	)
Commission's Triennial Review Order	)
	)

SURREBUTTAL TESTIMONY OF DR. MARK T. BRYANT

On Behalf Of

MCIMETRO ACCESS TRANSMISSION SERVICES, LLC

And

MCI WORLDCOM COMMUNICATIONS, INC.

March 31, 2004

- Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- A. My name is Mark T. Bryant, and my business address is 4209 Park Hollow Court,
   Austin, Texas.
- Q. ARE YOU THE SAME MARK T. BRYANT WHO PREVIOUSLY FILED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?
- A. Yes, I am.
- Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?
- A. The purpose of my rebuttal testimony is to respond to the rebuttal testimony of BellSouth witnesses Aron, Pleatsikas, and Ruscilli.
- I. Response to Rebuttal Testimony of Dr. Aron.
- Q. DR. ARON HAS CHARACTERIZED YOUR TESTIMONY REGARDING
  THE SOCIAL COSTS OF AN ERRONEOUS FINDING OF NONIMPAIRMENT AS "UNSUPPORTED" AND "SERIOUSLY MISGUIDED."
  HOW DO YOU RESPOND TO DR. ARON'S CRITICISMS?
- A. Dr. Aron argues that the social costs of an erroneous finding of non-impairment are in lost investment, innovation, and economic development whereas the social cost of an erroneous finding of impairment is "merely" the foregone entry of carriers that rely entirely on the network of the incumbent to provide service. Dr.

Aron's arguments misstate the situation facing the Commission and are both unsupported and misleading.

#### Q. IN WHAT WAY IS DR. ARON'S TESTIMONY MISLEADING?

A. In my direct testimony, I urged the Commission to be cautious in assessing the degree to which CLECs are impaired without access to unbundled switching, and to act to eliminate the availability of unbundled local switching only where a lack of impairment is unambiguously proven. In her rebuttal testimony, Dr. Aron appears to be suggesting that my recommendation was that impairment be found for all markets, whether it exists or not. Dr. Aron, for example, comments that I envisioned (in discussing the exit from the market of UNE-P based providers in the case of an erroneous finding of non-impairment) "instances in which a CLEC would rather exit the market than pursue the UNE-L opportunity." Aron Rebuttal at 7. She goes on to note that the exit of carriers that cannot survive in a UNE-L based market would create opportunities for those that can survive. Contrary to Dr. Aron's suggestion, however, an erroneous finding of impairment means that unbundled local switching would be eliminated where CLECs are, in fact, impaired without access to unbundled switching. Thus, an erroneous finding of nonimpairment would eliminate all current competitors, even the most efficient ones, from the local exchange market.

I do not recommend that the Commission find impairment where none exists. What I do recommend is that the Commission be very certain that

impairment does not exist, in view of the irreversible consequences of an erroneous finding of non-impairment.

- Q. DR. ARON MAINTAINS THAT AN ERRONEOUS FINDING OF
  IMPAIRMENT WOULD DAMAGE THE INCENTIVES OF BOTH THE
  CLECS AND THE ILECS TO INVEST IN NETWORK
  INFRASTRUCTURE, AND THAT INNOVATION WOULD BE
  SUPPRESSED. DO YOU AGREE?
- A. No, I do not. While I do agree that reliance upon the ILEC's switching facilities limits, to some extent, the ability of CLECs to develop certain types of new services, I do not agree that CLECs have failed to bring new services to market. The innovation of bundled offerings of local service, long distance service, and vertical features was one introduced to the market by CLECs, and the ILECs have been quick to follow suit. UNE-P based CLECs such as MCI and Z-tel have introduced sophisticated voice mail services that were not previously available from the ILECs. It simply is not true, as Dr. Aron implies through her use of terms such as "synthetic competition," that UNE-P based competition is without value.

That said, however, there is no question that CLECs would prefer to offer service using their own switches where it is economically feasible to do so. Doing so would give the CLEC greater control over its own service offerings and permit the introduction of more new service offerings than is possible with the use of UNE-P. A CLEC owning its own switch also would gain additional flexibility in the pricing of its services, since its prices would not be governed by the rate

structure imposed by the ILEC for use of unbundled switching. These are powerful incentives for the CLEC to invest in switching facilities – that more CLECs have not begun to offer mass market local exchange service using their own switches is thus equally powerful evidence that there are operational and economic barriers to doing so that have not been overcome.

- Q. IS THERE ANY EVIDENCE TO SUPPORT DR. ARON'S CLAIM THAT
  THE CONTINUED AVAILABILITY OF UNBUNDLED LOCAL
  SWITCHING WILL SUPPRESS INVESTMENT BY THE INCUMBENT
  CARRIERS?
- A. No. In fact, the available evidence is to the contrary. Prior to the passage of the Telecommunications Act of 1996, with its requirement that the ILECs make available unbundled network elements to CLECs, BellSouth's investment in its facilities was essentially flat. Beginning in 1996, BellSouth's plant additions increased dramatically, reaching a peak in 2001. In 2002, plant additions declined somewhat from this peak, but remained substantially above pre-1996 levels.

  Exhibit MTB-12 attached to this testimony is a chart illustrating the investment additions that BellSouth has made in its plant during the period 1990-2002. If the availability of unbundled network elements is a serious disincentive to ILEC investment, the empirical evidence should show a decline since 1996. It only makes sense that the increased competition resulting from the entry of new firms into the local exchange market would stimulate investment by the incumbent, and that is exactly what the evidence shows.

- Q. HAVE YOU SEEN OTHER EVIDENCE THAT THE INCREASED

  COMPETITION RESULTING FROM THE AVAILABILITY OF

  UNBUNDLED NETWORK ELEMENTS HAS STIMULATED ILEC

  INVESTMENT?
- A. Yes, in a recent essay addressing this topic, Professor Robert D. Willig of Princeton University has examined the available evidence and concluded that the availability of unbundled network elements timulates incumbent investment. Robert D. Willig, "Investment is Appropriately Stimulated by TELRIC." Prof. Willig further found that decreases in rates for UNEs actually are correlated with in an increase in ILEC investments. According to Prof. Willig, "...raising TELRIC or restricting access to UNEs, as the ILECs advocate, would both reduce the competitive alternatives available to consumers and reduce the ILEC's capital spending on their own networks." *Id.* at 3.10. Exhibit MTB-13 attached to this testimony is a copy of the essay by Prof. Willig.
- Q. DR. ARON ARGUES THAT A FINDING OF NO IMPAIRMENT
  INTRODUCES CONSISTENCY FOR THE USE OF LOCAL AND LONG
  DISTANCE NETWORKS. DO YOU AGREE?
- A. No. Dr. Aron attempts to form an analogy between the availability of long distance network capacity and the market-based prices that obtain in that market and the supposed availability of local switching at market-based prices if a ruling of no impairment for local switching is made. The analogy fails because there simply is no market for local switching in existence in South Carolina. To my knowledge, no

carrier has stated in this proceeding that it makes available local switching on a wholesale basis. This being the case, and because BellSouth has every incentive to raise its rivals' costs and the ability to do so in the absence of competitive switching supply, one could not reasonably expect that CLECs would pay anything like a cost-based rate for local switching if BellSouth were freed from the obligation to charge TELRIC-based rates.

- Q. DR. ARON CRITICIZES YOUR IMPAIRMENT ANALYSIS TOOL FOR ADOPTING AN IMPROPER FRAMEWORK FOR THE ANALYSIS OF THE CLEC PROFITABILITY IN THE ABSENCE OF UNBUNDLED LOCAL SWITCHING. DO YOU HAVE A RESPONSE?
- A. Yes. Dr. Aron's criticism is that the model fails to recognize that certain costs are incurred in the early periods of a company's operation, when revenues are low and net revenues therefore are likely to be negative. This is not the case. The impairment analysis tool that I presented with my direct testimony performs an annualization of capital costs over the depreciation life of each category of investment. This calculation involves a calculation of the net present value of future capital costs in order to levelize these costs over the life of the investment. Thus, with regard to capital costs, the model does not, as Dr. Aron claims, ignore the effect of high startup costs on CLEC profitability. The approach taken in the impairment analysis tool is similar to that that has been used in setting rates for unbundled network elements, an approach designed to determine the forward-looking cost of an efficient network operator.

Dr. Aron goes on to criticize the impairment analysis tool for failing to consider growth in revenue or market share over time. While it is true that the model considers a "steady state" single period in time, the input assumptions can be varied to consider any level of market share or price that is of interest.

- II. Response to Rebuttal Testimony of Dr. Pleatsikas
- Q. DR. PLEATSIKAS CLAIMS THAT YOU PROVIDE NO UNAMBIGUOUS INDICATION OF WHICH MARKET DEFINITION TO USE FOR PURPOSES OF THIS PROCEEDING. IS THAT THE CASE?
- A. No. I believe I unambiguously stated that the appropriate market definition is the wire center. My discussion of a possible market definition that would comprise individual customer locations was intended to illustrate the different characteristics of customers that contribute to differences in wire center costs.
- Q. DR. PLEATSIKAS CLAIMS THAT AGGREGATIONS OF WIRE
  CENTERS THAT SHARE SIMILAR COST AND REVENUE
  CHARACTERISTICS MAY CONSTITUTE AN APPROPRIATE
  MARKET DEFINITION. DO YOU AGREE?
- A. No, I do not. One certainly can aggregate markets for administrative convenience, perhaps, but such an aggregation is not a market definition. In order to determine, as Dr. Pleatsikas suggests, that "wire centers in a geographic area share certain cost and other economic characteristics," it is necessary first to examine the costs and economic characteristics *for each wire center*. Dr. Pleatsikas seems to assume

that because UNE rates are applicable to all wire centers in a particular UNE rate zone, those wire centers must share similar cost characteristics. The rate for unbundled network elements, however, is only one factor that affects the costs and revenues that in turn affect a CLEC's entry decision. Wire centers also vary along other dimensions. The number of customers served from each wire center, the mix of business and residential customers in each wire center, the proportion of customers served via digital loop carrier equipment, the demographic characteristics of the customers in the wire center, and the distance of the wire center from the CLEC's switch all have an impact on the potential profitability of providing service in the wire center.

- Q. DR. PLEATSIKAS STATES THAT "COLLOCATION COSTS CAN INFLUENCE WHERE A CLEC MAY SEEK TO OFFER SERVICES IN A MARKET, BUT THEY DO NOT, BY THEMSELVES, DETERMINE THE GEOGRAPHIC SCOPE OF THE MARKET." (PLEATSIKAS REBUTTAL AT 8). DOES THE FCC OFFER ANY GUIDANCE ON THE GEOGRAPHIC SCOPE OF A MARKET, WHERE A CLEC CANNOT SERVE THE ENTIRE MARKET?
- A. Yes. As I noted in my direct testimony, at paragraph 499 of the TRO, note 1552, the FCC states that "...where switch providers (or the resellers that rely on them) are identified as serving, or capable of serving, only part of the market, the state commission may choose to consider defining that portion of the market as a separate market for that portion of its analysis."

- Q. DR. PLEATSIKAS CITES A RESPONSE BY FCCA TO A BELLSOUTH INTERROGATORY IN FLORIDA TO THE EFFECT THAT ONLY TWO OF THE MEMBER COMPANIES DECIDE TO ENTER A MARKET ON A WIRE CENTER BASIS AS SUPPORT FOR THE PROPOSITION THAT CLECS DO NOT, IN FACT, DECIDE TO ENTER MARKETS WIRE CENTER BY WIRE CENTER. DO YOU HAVE A RESPONSE TO THIS TESTIMONY?
- A. Yes. The interrogatory question cited by Dr. Pleatsikas was not specific enough to yield useful information on the situation that would be faced by CLECs in a post UNE-P environment. The question asked is as follows:

Identify each individual carrier that comprises the FCCA and state whether each such carrier decides to enter a market at the wire-center level.

The question does not state the market to be served, nor does it state the circumstances to be assumed in answering the question. A carrier providing mass market service today using UNE-P might interpret the question to refer to its current situation. Such a carrier naturally would not consider the market in terms of individual wire centers, but would be focused on the cost of UNE rates as they vary among rate zones, and perhaps on the entire state of Florida as a potential market. If the same carrier were asked whether it would consider wire center specific costs in making entry decisions under the assumption that unbundled local switching is no longer available, and that, in order to provide local exchange service, it would have to establish collocations in each wire center, almost certainly would consider the question in a different light. I do not know how the CLECs

answering the question interpreted it, but the question is so vague that no confidence should be placed in the quality of the answers received.

In addition to the two CLECs in the FCCA interrogatory response that replied that they do make entry decisions at the wire center level, at least one other CLEC has responded to discovery indicating that it does, in fact, make entry decisions by considering the characteristics of individual wire centers. In response to BellSouth's Interrogatory number 95 in Florida, Allegiance responded as follows;

#### Question:

95. Describe the criteria you consider to enter a specific market offering qualified services. In your response please detail how, and the extent to which, you rely on both business customers and residential customers to meet the financial criteria. Also identify the criteria used to select the customer that are marketed to or contacted in your marketing campaigns.

#### Answer:

Allegiance deployed a switch in Miami as part of its strategy to become a national local service provider. The geographic location of the switch was based on several factors including minimizing backhaul costs from collocation sites, space availability and where Allegiance could get access to CAPs.

The single most important criterion for Allegiance in determining where to build a collocation is the number of lines served by the individual wire center. Given the costs of collocation construction, equipment, power, and the like, a CLEC must be reasonably confident it can acquire enough customers in a wire center to cover those costs and earn a profit in order to proceed with construction of the collocation. Allegiance generally has not built collocations in wire centers with fewer than 9,000 - 10,000 business lines.

The factors cited by Allegiance in its response are some of the same factors that I have noted in defining the relevant market as the ILEC wire center.

- Q. DR. PLEATSIKAS STATES THAT A PROPER MARKET DEFINITION

  MUST CONSIDER BOTH DEMAND-SIDE AND SUPPLY-SIDE

  SUBSTITUTABILITY. DO YOU AGREE?
- A. Yes, I agree that supply-side substitutability should be considered in defining a market. I also agree that the cost of a CLEC switch and some of the costs incurred by a CLEC in marketing services apply to a geographic area larger than the wire center. The real question, however, is whether the economies of scale achievable through recovery of these costs over a larger customer base are sufficient to overcome the cost differences that exist among wire centers. As I demonstrated in my rebuttal testimony, the greater proportion of the economies of scale that are present in switch costs are achieved very rapidly, and, once the CLEC has gained a relatively small share of the market, acquisition of additional customers does not result in significant additional cost savings. This being the case, a CLEC contemplating adding a collocation to a wire center where profitability is marginal or negative must balance the losses that it will incur by collocating in that wire center against the cost savings that it will achieve in its switch costs. A wire center that is losing two or three dollars per line per month will not be made to look profitable if the cost savings in switch costs are a few pennies per line per month. In effect, Dr. Pleatsikas is ignoring the 800-pound gorilla of collocation and

backhaul costs in his exclusive attention on the gnat that is economies of scale in switching and marketing costs.

- III. Response to the Rebuttal Testimony of Mr. Ruscilli
- Q. MS. RUSCILLI CLAIMS THAT YOUR WIRE CENTER MARKET

  DEFINITION IS INCONSISTENT WITH TESTIMONY PREVIOUSLY

  FILED BY A WITNESS ON BEHALF OF MCI STATING THAT MCI

  SWITCHES SERVE A LARGER GEOGRAPHIC AREA THAN ILEC

  SWITCHES. IS THIS INDEED AN INCONSISTENCY?
- A. No, it is not. I have never stated that CLEC switches are not potentially capable of serving a large geographic area. The consistent thrust of my testimony has been that the cost of placing a switch is not the most significant factor affecting a CLEC's decision to enter a particular market. Rather, it is the cost of establishing collocations and the potential revenues available in each wire center that will determine CLEC profitability.

In the testimony cited by Mr. Ruscilli, the witness was describing MCI's provision of service to enterprise customers that are located in buildings served by MCI's metropolitan fiber networks. These networks have been designed to reach buildings and campus environments that have a sufficiently large concentration of customers with a high enough demand for telecommunications services that the construction of fiber optic networks to serve those concentrations is economically justified.

This is an entirely different proposition than attempting to provide service to the mass market, where customers are widely dispersed, and where the cost of establishing collocation and transport facilities to aggregate customer traffic at the CLEC switch may render the provision of service unprofitable. There is no contradiction at all in the testimony cited by Mr. Ruscilli and my own testimony.

# Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.